

CLAIMS

Claim 1
A high voltage component formed in a region of a silicon substrate of a first conductivity type delimited by a wall of the second conductivity type, having a lower surface including a first region of the second conductivity type connected to the wall, and an upper surface including at least

5 a second region of the second conductivity type, a high voltage being likely to exist between the first and second regions and having to be withheld on the upper surface side by the junction between the second region and the substrate or by the junction between the wall and the substrate, a conductive track being likely to be at a high potential extending above the substrate between the second region and the wall,

10 including a third region of the first conductivity type of high doping level formed in the substrate under a portion of the track substantially halfway between the external periphery of the second region and the internal periphery of the wall, this third region being contacted by a field plate insulated from the track, extending widthwise at least substantially across the track width and lengthwise on either side of the third region in the direction of the wall and of the second region.

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2. The component of claim 1, wherein the field plate extends beyond the third region in the wall direction and in the direction of the second region over a distance greater than 10 μm .

3. The component of claim 1, wherein the external periphery of the second region comprises
20 a ring of the same conductivity type of low doping level.

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